

Inhibition of beta-amyloid Aggregation of Ugni molinae Extracts

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Abstract

The beta-amyloid peptide (1-42) is a molecule capable of aggregating into neurotoxic structures that have been implicated as potential etiological factors of Alzheimer's Disease. The aim of this study was to evaluate the inhibition of beta-amyloid aggregation of ethyl acetate and ethanolic extracts obtained from Ugni molinae leaves on neurotoxic actions of beta-amyloid aggregates. Chemical analyses were carried out with the extracts in order to determine their phenolic profile and its quantification. Both extracts showed a tendency to reduce neuronal deaths caused by beta-amyloid. This tendency was inversely proportional to the evaluated concentrations. Moreover, the effect of EAE and ETE on beta-amyloid aggregation was studied by fluorimetric T Thioflavin assay and transmission electronic microscopy (TEM); the extracts showed a modulation in the aggregation process. Partly, it is believed that these effects can be attributed to the polyphenolic compounds present in the extracts.

Keywords

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